

- 6 The device according to claim 1 wherein the sample applied is environmental water.
- 7 The device according to claim 6 where the sample is selected from among tap water, swimming pool water, or fish tank water.
- 8 The device according to claim 1 wherein the matrix is a membrane, or a filter paper.
- 9 The device according to claim 1 wherein the matrix is prepared from one or a combination of two or more membranes selected from among asymmetric membranes and polyethylene sulfone membranes.
- 10 The device according to claim 9 where in the matrix may be prepared from a combination of membranes and filter paper, with bridge pads included where junctions of membranes and paper occur.
- 11 The device according to claim 1 wherein the number of connected arms may vary from 2 to 16.
- 12 The device according to claim 1 wherein the measurable signal produced is colorimetric, fluorescent or electrochemical.
- 13 The device according to claim 12 wherein the signal produced at each reagent site is a color that is measured by a device comprised of at least one light emitting diode and at least one light detector in the range between 360 and 880nm wavelength.